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U.S. Serial No.: 10/509,880

IN THE CLAIMS:

Please cancel claim 6 without prejudice to the claimed subject matter, amend claims 1, 3, 5, 7, 9, 14 and 15 as indicated in the following Listing of Claims.

LISTING OF CLAIMS

- 1 1. (Currently amended) A water filter cartridge device
2 having a replaceable water filter cartridge and a separately,
3 especially for treating drinking water with a replaceable control
4 unit to monitor the condition of the water filter cartridge
5 wherein the improvement comprises a replaceable control unit
6 having a sensor unit (11) with at least one penetrating
7 conductance sensor (13) replaceably removable from a filter
8 cartridge wall that penetrates having a first conductance sensor

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

9 (13) that pierces through a filter cartridge wall of a
10 replaceable water filter cartridge without contacting a filter
11 granulate or a filter medium while in contact with water purified
12 by said replaceable water filter cartridge and a second
13 conductance sensor (14) in contact with unpurified water before
14 said unpurified water enters said replaceable water filter
15 cartridge and an electronic evaluation unit in said replaceable
16 control unit to determine when said replaceable control unit has
17 been attached to a new replaceable water filter cartridge.

1 2. (Previously presented) The water filter cartridge
2 according to Claim 1 wherein the at least one penetrating
3 conductance sensor (13) measures conductivity of filtered water.

1 3. (Currently amended) The water filter cartridge
2 according to claim 1 or 2 wherein said at least one penetrating
3 conductance sensor (13) penetrates through the filter cartridge

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

4 wall by puncturing piercing through a top wall of the filter
5 cartridge.

1 4. (Previously presented) The water filter cartridge
2 according to claim 1 further comprising at least one passage or
3 at least one break point for receiving said at least one
4 penetrating conductance sensor (13).

1 5. (Currently amended) The water filter cartridge
2 according to claim 1 ~~further comprising a~~ wherein said second
3 conductance sensor (14) ~~for measuring~~ measures the quality of
4 unfiltered water.

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

1 6. Canceled without prejudice.

1 7. (Currently amended) The water filter cartridge
2 according to claim 1 or 5 ~~further comprising an~~ wherein said
3 electronic evaluation unit (19) ~~for taking~~ takes into account the
4 difference between at least two conductance values in performing
5 an evaluation.

1 8. (Previously presented) The water filter cartridge
2 according to claim 1 or 5 further comprising a temperature sensor
3 (15).

1 9. (Currently amended) The water filter cartridge

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

2 according to claim 1 or 5 ~~further comprising an~~ wherein said
3 evaluation unit ~~and includes~~ a timing element ~~in~~ said evaluation
4 unit.

1 10. (Previously presented) The water filter cartridge
2 according to claim 1 or 5 further comprising a display (16) for
3 displaying the condition of the water filter cartridge (1).

1 11. (Previously presented) The water filter cartridge
2 according to claim 1 further comprising fastening elements (12)
3 to fasten the sensor unit (11) to the filter cartridge (1).

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

1 12. (Previously presented) The water filter cartridge
2 according to claim 11 wherein at least some of the fastening
3 elements are catches (12).

1 13. (Previously presented) The water filter cartridge
2 according to claim 1 further comprising a beverage machine or
3 drinking water device.

1 14. (Currently amended) A filter cartridge device for
2 treating drinking water having a replaceable control unit to
3 monitor the condition of ~~the a~~ a replaceable water filter cartridge
4 wherein the improvement comprises a replaceable control unit
5 separately replaceable from said separately replaceable water
6 filter cartridge, said replaceable control unit having a sensor
7 unit (11) with at least one penetrating conductance sensor (13,
8 14) replaceably removable from a filter cartridge wall, said

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

9 penetrating conductance sensor having at least one needle-shaped
10 electrode for passing piercing through a wall of said replaceable
11 water filter cartridge intermediate a filter medium and a screen
12 in said replaceable water filter cartridge to contact water that
13 is to be filtered by said filter medium without contacting a said
14 filter medium and a said replaceable water filter cartridge
15 having a corresponding break point or an area with an elastic
16 sealing material disposed on an outside wall of the replaceable
17 water filter cartridge for locating a point of piercing for said
18 at least one needle-shaped electrode and fastening elements (12)
19 being provided to attach the sensor unit (11) to the outside of
20 said replaceable filter cartridge (1) to allow at least one other
21 electrode of said sensor unit to contact water before filtering
22 in said replaceable filter cartridge.

1 15. (Currently amended) A water filtration apparatus for
2 drinking water comprising:
3 (a) a replaceable filter cartridge having a filter
4 medium and a break point or and an elastic sealing material in a

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

5 wall of said replaceable filter cartridge;

6 (b) a replaceable control unit replaceably removable
7 from a replaceable filter cartridge wall having at least one
8 needle-shaped penetrating conductance sensor for measuring a
9 quality of filtered water and for puncturing piercing through
10 said wall of said replaceable filter cartridge at said break
11 point and said elastic sealing material to provide a sealing fit
12 to said at least one needle shaped penetrating conductance sensor
13 ~~or at said elastic sealing material~~ without contacting said
14 filter medium, said replaceable control unit having at least one
15 other conductance sensor for measuring a quality of unfiltered
16 water; and

17 (c) an electronic evaluation unit in said replaceable
18 control unit for comparing said quality of filtered water with
19 said quality of unfiltered water and determining when said
20 replaceable control unit has been attached to a new replaceable
21 filter cartridge; and

22 (d) a peripheral annular groove on said replaceable
23 filter cartridge adapted to receive said replaceable control unit
24 in said groove in snapping engagement when said needle-shaped
25 penetrating conductance sensor has been inserted in said
26 replaceable filter cartridge without contacting said filter

HARALD SCHROTT,
ANDREAS WAWRLA and
KLAUS ZUCHOLL
U.S. Serial No.: 10/509,880

27 medium.